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Ex Parte

December 4, 2001

Ms. Magalie Roman Salas
Secretary
Federal Communications Commission
445 – 12th Street, SW
Room: TW-A325
Washington, DC 20554

Re: **ET Docket No. 98-153**; Ultra-Wideband Transmission Systems

Dear Ms. Salas:

Today, the attached letter was sent to Chairman Powell regarding the Commission's pending rulemaking proceeding on "Ultra-Wideband".

Please include a copy of this ex parte presentation in the record for the above captioned proceeding. In accordance with § 1.1206 of the Commission's rules, an original and one copy of this ex parte presentation is being filed with the Secretary's office. If you have any questions, you may call me on (202) 589-3785.

cc: P. Tenhula

**AT&T WIRELESS
CINGULAR WIRELESS
QUALCOMM
SPRINT PCS
VERIZON WIRELESS**

December 4, 2001

Honorable Donald L. Evans
Secretary of Commerce
U.S. Department of Commerce
14th & Constitution Ave., NW
Washington, DC 20230

Honorable Michael K. Powell
Chairman
Federal Communications Commission
445 12th Street, NW
Washington, DC 20554

We are writing to express our concern with a proceeding pending at the Commission that would authorize the use of ultra-wideband ("UWB") devices and networks. The operation of such devices has the potential to cause significant interference to commercial mobile systems, as well as to a wide range of other radio systems including those operated by various Federal agencies. While we support policies and regulations that promote the development of innovative technologies, including UWB, such technologies should not be advanced to the detriment of existing wireless services.

Last year, Sprint PCS and Time Domain, a developer of UWB technology, conducted joint tests with Telcordia, an independent research firm, to determine the impact that UWB may have on PCS networks. These tests demonstrate that UWB devices operating in the PCS band would (1) block some PCS calls from being made when the PCS phone is in close proximity to the UWB device, (2) reduce the capacity of existing wireless networks, allowing carriers to serve fewer customers, and (3) reduce network performance, resulting in degraded voice quality and decreased throughput for wireless data applications. The potential impacts of UWB devices on commercial wireless networks are significant and cannot be ignored.

The commercial mobile industry is one of the leading drivers in the United States economy. Collectively, the industry serves almost 125 million residential and business customers in the U.S., as well as a variety of Federal, state, and local agencies. While the wireless industry has enjoyed enormous success and wireless consumers have benefited substantially, the future holds even greater promise. Wireless carriers are now beginning to deploy Third Generation ("3G") technologies that will facilitate the development of a variety of innovative wireless data applications. Last October, the Council of Economic Advisers estimated that the public benefits from 3G-based services will be \$53-\$111 billion annually. These new technologies will not only allow wireless carriers to meet the increasing demands of their mobile customers, but will also position wireless services as competitive alternatives to local telephone service. However, these substantial public benefits are at risk if UWB devices are permitted to be deployed in the PCS band or other spectrum licensed for commercial wireless services. While the impacts of UWB devices on existing wireless networks are significant, the impacts on wideband 3G technologies are even greater.

Commercial wireless operators, however, are not the only ones potentially affected by UWB devices. NTIA, in cooperation with the Department of Defense ("DoD") and other Federal agencies, has conducted extensive testing to determine the impacts of UWB on Federal radio systems. In a recent letter to Secretary Evans, Deputy Secretary of Defense Paul Wolfowitz notes that UWB devices "have significant potential for causing harmful interference to the Global Positioning System ("GPS") and other critical DoD systems." DoD is conducting a full review of the Commission's draft rules, and asks that the Commission delay any decision in this proceeding until at least February. We concur with DoD's assessment, and are particularly troubled by the potential impact on GPS. Since many wireless carriers are using GPS to deploy E911, interference to GPS-related systems would have a detrimental impact on E911 services as well as on commercial GPS applications related to location and network synchronization.

We are not opposed to the operation of UWB devices. In fact, we support the establishment of rules that will facilitate the development of such technologies, as long as they do not interfere with the use of spectrum licensed to commercial operators. In furtherance of this objective, we believe that there are certain UWB applications/devices that can be authorized now with appropriate technical rules. For example, we would not oppose the authorization of ground penetrating radar systems operating below 1 GHz as well as unlicensed UWB communications systems operating above 3.1 GHz. However, given the potential interference to other important radio systems, we agree with those that propose to exclude UWB devices from the 1-6 GHz range until additional testing can be conducted that clearly demonstrates the ability of UWB devices to operate without causing harmful interference to such systems.

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We appreciate the important roles that your agencies have in establishing policies and regulations that promote the development of new technologies and the more efficient use of the radio spectrum. However, the authorization of UWB devices in bands used for commercial wireless services – absent clear evidence that harmful interference will not result – will not advance these objectives. We urge you to support policies that promote innovation while protecting the operations of existing wireless services.

Respectfully Submitted,

/s/
Douglas I. Brandon
Vice President, External Affairs
AT&T Wireless

/s/
Brian F. Fontes, Ph.D.
Vice President, Federal Relations
Cingular Wireless

/s/
Jonas Neihardt
Vice President, Federal Government
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Qualcomm

/s/
Luisa L. Lancetti
Vice President, PCS Regulatory Affairs
Sprint Corporation

/s/
John T. Scott
Deputy General Counsel &
Vice President – Regulatory Law Group
Verizon Wireless, Inc.

cc: Honorable Condoleezza Rice
Honorable Samuel Bodman
Honorable Paul Wolfowitz
Honorable Lawrence Lindsey
Mr. Michael Gallagher